

**Commonwealth of Kentucky  
Environmental and Public Protection Cabinet  
Department for Environmental Protection  
Division for Air Quality  
803 Schenkel Lane  
Frankfort, Kentucky 40601  
(502) 573-3382**

**Draft**

**AIR QUALITY PERMIT  
Issued under 401 KAR 52:030**

**Permittee Name:** Northern KY University  
**Mailing Address:** Nunn Drive, Highland Heights, Kentucky 41099

**Source Name:** Northern KY University  
**Mailing Address:** Nunn Drive  
Highland Heights, Kentucky 41099

**Source Location:** Nunn Drive

**Permit:** F-08-007  
**Agency Interest:** 37575  
**Activity:** APE20080001  
**Review Type:** Conditional Major, Operating /Construction  
**Source ID:** 21-037-00095

**Regional Office:** Florence Regional Office  
8020 Veterans Memorial Drive, Suite 110  
Florence, KY 41042  
(859) 525-4923

**County:** Campbell

**Application**  
**Complete Date:** March 07, 2008  
**Issuance Date:**  
**Revision Date:**  
**Expiration Date:**

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**John S. Lyons, Director  
Division for Air Quality**

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	Permit type	Activity#	Complete Date	Issuance Date	Summary of Action
<b>F-02-025</b>	<b>Initial Issuance</b>		<b>12-12-2002</b>	<b>June 25, 2003</b>	<b>Initial Permit</b>
<b>F-02-025R1</b>	<b>Minor Revision</b>	<b>APE20060003</b>	<b>8-16-2006</b>	<b>October 26, 2006-</b>	<b>Addition of Units 16&amp;17</b>
<b>F-02-025R2</b>	<b>Minor Revision</b>	<b>APE20070003</b>	<b>8-16-2007</b>	<b>August 2007</b>	<b>Addition of existing diesel generators</b>
<b>F-08-007</b>	<b>Renewal</b>	<b>APE20080001</b>	<b>3-07-08</b>	<b>---</b>	<b>Operate/Construction Permit</b>

## **SECTION A - PERMIT AUTHORIZATION**

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in Regulation 401 KAR 50:030, Federally-enforceable permits for non-major sources.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS****Emission Unit 1      Indirect Heat Exchanger****Description:**

Primary fuel:	Natural Gas
Secondary fuel:	#2 fuel oil
Unit 1 (Power Plant #1)	
Maximum Continuous Rating:	25.2 MMBtu/hr
Construction Commenced:	2002

**APPLICABLE REGULATIONS:**

401 KAR 59:015, New Indirect Heat Exchangers applicable to an emission unit with a capacity less than 250 MMBtu/hr and commenced on or after April 9, 1972.

401 KAR 60:005, incorporating by reference 40 CFR 60, Subpart Dc, Standards of performance for small industrial-commercial-institutional steam generating units, for units less than or equal to 100 MMBtu/hr but greater than or equal to 10 MMBtu/hr commenced after June 9, 1989.

**1.      Operating Limitations:**

See Section D.

**2.      Emission Limitations:**

- a. Pursuant to 401 KAR 59:015, Section 4(1)(b), particulate emissions shall not exceed 0.1 lb/ MMBtu based on a three-hour-average, for the emission unit.

**Compliance Demonstration:**

Compliance with the allowable particulate emission limitation while burning #2 fuel oil may be demonstrated by calculating emissions rate using the following formula:

PM emissions (lb/ MMBtu) =  $2.0 \text{ lbs/ } 10^3 \text{ gallons (AP-42 emission factor) / \#2 fuel oil heating value ( MMBtu/ } 10^3 \text{ gallons)}$ .

- b. Pursuant to 401 KAR 59:015, Section 4(2), visible emissions shall not exceed 20% opacity based on a six minute average except:
  1. A maximum of forty (40) percent opacity shall be permissible for not more than six (6) consecutive minutes during in any sixty (60) consecutive minutes during cleaning the fire box or blowing soot.
  2. During building a new fire for the period required to bring the boiler up to operating conditions provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations.

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- c. Pursuant to 401 KAR 60:005, incorporating by reference 40 CFR 60, Subpart Dc, sulfur dioxide emissions shall not exceed 0.8 lb/ MMBtu, for the emission unit. Compliance with the allowable sulfur dioxide emission limitation while burning #2 fuel oil may be demonstrated based on fuel supplier certification.

### **Compliance Demonstration:**

The permittee is considered to be in compliance with PM, SO<sub>2</sub> and opacity standards while burning natural gas.

### **3. Testing Requirements:**

None

### **4. Specific Monitoring Requirements:**

- a. Pursuant to 401 KAR 52:030, Section 26, the permittee shall monitor the usage and hours of operation for the #2 fuel oil and the natural gas on a monthly basis.
- b. Pursuant to 401 KAR 52:030, Section 26, while burning #2 fuel oil the permittee shall perform a qualitative visible observation of the opacity emissions from the stack on a weekly basis and maintain a log of the observations. If visible emissions from the stack are seen, then compliance with the opacity standard shall be demonstrated by reading the opacity by EPA Reference Method 9.

### **5. Specific Recordkeeping Requirements:**

Pursuant to 401 KAR 52:030, Section 26, records of the amount of natural gas burned and amount and hours of operation for #2 fuel oil burned shall be maintained on a monthly basis.

### **6. Specific Reporting Requirements:**

- a. Pursuant to 401 KAR 52:030, Section 26, if #2 fuel oil is burned in the unit, the permittee shall submit quarterly reports including the fuel supplier certification and a certified statement signed by the owner or operator of the affected facility that the records of the fuel supplier certifications submitted represent the #2 fuel oil combusted during that quarter.
- b. See Section F.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****Emission Units 2 & 3****Two Indirect Heat Exchangers****Description:**

Primary fuel: Natural Gas  
Secondary fuel: #2 fuel oil

Units 2 & 3 (Power Plant #2 & 3)

Maximum Continuous Rating: 60.7 MMBtu/hr, each

Construction Commenced: 2002

**APPLICABLE REGULATIONS:**

401 KAR 59:015, New Indirect Heat Exchangers applicable to an emission unit with a capacity less than 250 MMBtu/hr and commenced on or after April 9, 1972.

401 KAR 60:005, incorporating by reference 40 CFR 60, Subpart Dc, Standards of performance for small industrial-commercial-institutional steam generating units, for units less than or equal to 100 MMBtu/hr but greater than or equal to 10 MMBtu/hr commenced after June 9, 1989.

**1. Operating Limitations:**

See Section D.

**2. Emission Limitations:**

- a. Pursuant to 401 KAR 59:015, Section 4(1)(b), particulate emissions shall not exceed 0.1 lb/ MMBtu based on a three-hour-average, for each emission unit.

**Compliance Demonstration:**

Compliance with the allowable particulate emission limitation while burning #2 fuel oil may be demonstrated by calculating emissions rate using the following formula:

$$\text{PM emissions (lb/ MMBtu)} = 2.0 \text{ lbs/ } 10^3 \text{ gallons (AP-42 emission factor) / \#2 fuel oil heating value ( MMBtu/ } 10^3 \text{ gallons).}$$

- b. Pursuant to 401 KAR 59:015, Section 4(2), and 401 KAR 60:005, incorporating by reference 40 CFR 60, Subpart Dc, visible emissions shall not exceed 20% opacity based on a six minute average, except for one six minute period per hour of not more than 27% opacity.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- c. Pursuant to 401 KAR 59:015, Section 4(2), for visible emissions:
  - 1. A maximum of forty (40) percent opacity shall be permissible for not more than six (6) consecutive minutes during in any sixty (60) consecutive minutes during cleaning the fire box or blowing soot.
  - 2. During building a new fire for the period required to bring the boiler up to operating conditions provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations.
- d. Pursuant to 401 KAR 60:005, incorporating by reference 40 CFR 60, Subpart Dc, sulfur dioxide emissions shall not exceed 0.8 lb/ MMBtu, for each emission unit. Compliance with the allowable sulfur dioxide emission limitation while burning #2 fuel oil may be demonstrated based on fuel supplier certification.

**Compliance Demonstration:**

The permittee is considered to be in compliance with PM, SO<sub>2</sub> and opacity standards while burning natural gas.

**3. Testing Requirements:**

None

**4. Specific Monitoring Requirements:**

- a. Pursuant to 401 KAR 52:030, Section 26, the permittee shall monitor the usage and hours of operation for the #2 fuel oil and the natural gas on a monthly basis.
- b. Pursuant to 401 KAR 52:030, Section 26, while burning #2 fuel oil the permittee shall perform a qualitative visible observation of the opacity emissions from the stack on a weekly basis and maintain a log of the observations. If visible emissions from the stack are seen, then compliance with the opacity standard shall be demonstrated by reading the opacity by EPA Reference Method 9.

**5. Specific Recordkeeping Requirements:**

Pursuant to 401 KAR 52:030, Section 26, records of the amount of natural gas burned and amount and hours of operation for #2 fuel oil burned shall be maintained on a monthly basis.

**6. Specific Reporting Requirements:**

- a. Pursuant to 401 KAR 52:030, Section 26, if #2 fuel oil is burned in the unit, the permittee shall submit quarterly reports including the fuel supplier certification and a certified statement signed by the owner or operator of the affected facility that the records of the fuel supplier certifications submitted represent the #2 fuel oil combusted during that quarter.
- b. See Section F.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****Emission Units 4, 5, 6, 7, 10, 11 & 12    Seven Indirect Heat Exchangers****Description:**

Primary fuel:	Natural Gas
Secondary fuel:	#2 fuel oil (Units 4-7)
Secondary fuel:	Propane (Units 10-12)

Unit 4 (Norse Hall #1)	
Maximum Continuous Rating:	3.0 MMBtu/hr
Construction Commenced:	approximately 1992

Units 5 & 6 (Norse Hall #2 & Woodcrest)	
Maximum Continuous Rating:	1.8 MMBtu/hr, each
Construction Commenced:	approximately 1992

Unit 7 (Ceramics)	
Maximum Continuous Rating:	2.45 MMBtu/hr
Construction Commenced:	approximately 1996

Units 10, 11 & 12 (University Suites 1, 2 & 3)	
Maximum Continuous Rating:	2.0 MMBtu/hr
Construction Commenced:	approximately 2003

**APPLICABLE REGULATIONS:**

401 KAR 59:015, New Indirect Heat Exchangers applicable to an emission unit with a capacity less than 250 MMBtu per hour and commenced on or after April 9, 1972.

**1. Operating Limitations:**

See Section D.

**2. Emission Limitations:**

- Pursuant to 401 KAR 59:015, Section 4(1)(b), particulate emissions shall not exceed 0.1 lb/ MMBtu based on a three-hour-average, for each emission unit.

**Compliance Demonstration:**

Compliance with the allowable particulate emission limitation while burning #2 fuel oil may be demonstrated by calculating emissions rate using the following formula:

PM emissions (lb/ MMBtu) = 2.0 lbs/ 10<sup>3</sup> gallons (AP-42 emission factor) / #2 fuel oil heating value ( MMBtu/ 10<sup>3</sup> gallons).

- Pursuant to 401 KAR 59:015, Section 4(2), emissions shall not exceed twenty (20) percent opacity based on a six-minute average except:
  - A maximum of forty (40) percent opacity shall be permissible for not more than six (6) consecutive minutes during in any sixty (60) consecutive minutes during cleaning the fire box or blowing soot.



**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

2. During building a new fire for the period required to bring the boiler up to operating conditions provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations.
- c. Pursuant to 401 KAR 59:015, Section 5(1)(b), sulfur dioxide emissions shall not exceed 0.8 lb/ MMBtu based on a three-hour-average, for each emission unit. Compliance with the allowable sulfur dioxide emission limitation while burning #2 fuel oil may be demonstrated based on fuel supplier certification.

**Compliance Demonstration:**

The permittee is considered to be in compliance with PM, SO<sub>2</sub> and opacity standards while burning natural gas.

**3. Testing Requirements:**

None

**4. Specific Monitoring Requirements:**

- a. Pursuant to 401 KAR 52:030, Section 26, the permittee shall monitor the usage and hours of operation for the #2 fuel oil and the natural gas on a monthly basis.
- b. Pursuant to 401 KAR 52:030, Section 26, while burning #2 fuel oil the permittee shall perform a qualitative visible observation of the opacity emissions from the stack on a weekly basis and maintain a log of the observations. If visible emissions from the stack are seen, then compliance with the opacity standard shall be demonstrated by reading the opacity by EPA Reference Method 9.

**5. Specific Recordkeeping Requirements:**

Pursuant to 401 KAR 52:030, Section 26, records of the amount of natural gas burned and amount and hours of operation for #2 fuel oil burned shall be maintained on a monthly basis.

**6. Specific Reporting Requirements:**

- a. Pursuant to 401 KAR 52:030, Section 26, if #2 fuel oil is burned in the unit, the permittee shall submit quarterly reports including the fuel supplier certification and a certified statement signed by the owner or operator of the affected facility that the records of the fuel supplier certifications submitted represent the #2 fuel oil combusted during that quarter.
- b. See Section F.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****Emission Units 8 & 9 Two Indirect Heat Exchangers****Description:**

Primary fuel:	Natural Gas
Secondary fuel:	#2 fuel oil
Maximum Continuous Rating:	5.33 MMBtu/hr each
Construction Commenced:	Approximately 1971

**APPLICABLE REGULATIONS:**

401 KAR 61:015, Existing Indirect Heat Exchangers applicable to an emission unit with a capacity less than 250 MMBtu per hour and commenced before April 9, 1972.

**1. Operating Limitations:**

See Section D.

**2. Emission Limitations:**

- a. Pursuant to 401 KAR 61:015, Section 4, particulate emissions shall not exceed 0.55 lb/MMBtu based on a three-hour-average.

**Compliance Demonstration:**

Compliance with the allowable particulate emission limitation while burning #2 fuel oil may be demonstrated by calculating emissions rate using the following formula:

PM emissions (lb/ MMBtu) = 2.0 lbs/ 10<sup>3</sup> gallons (AP-42 emission factor) / #2 fuel oil heating value ( MMBtu/ 10<sup>3</sup> gallons).

- b. Pursuant to 401 KAR 61:015, Section 4 (2), emissions shall not exceed 20 percent opacity with respect to particulate matter based on a six-minute average except.
  1. A maximum of forty (40) percent opacity shall be permissible for not more than six (6) consecutive minutes during in any sixty (60) consecutive minutes during cleaning the fire box or blowing soot.
  2. During building a new fire for the period required to bring the boiler up to operating conditions provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations.
- c. Pursuant to 401 KAR 61:015, Section 5(1), sulfur dioxide emissions shall not exceed 5.95 lb/MMBtu based on a twenty-four-hour average. Compliance with the allowable sulfur dioxide emission limitation while burning #2 fuel oil may be demonstrated based on fuel supplier certification.

**Compliance Demonstration:**

The permittee is considered to be in compliance with PM, SO<sub>2</sub> and opacity standards while burning natural gas.

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**3. Testing Requirements:**

None

**4. Specific Monitoring Requirements:**

- a. Pursuant to 401 KAR 52:030, Section 26, the permittee shall monitor the usage and hours of operation for the #2 fuel oil and the natural gas on a monthly basis.
- b. Pursuant to 401 KAR 52:030, Section 26, while burning #2 fuel oil the permittee shall perform a qualitative visible observation of the opacity emissions from the stack on a weekly basis and maintain a log of the observations. If visible emissions from the stack are seen, then compliance with the opacity standard shall be demonstrated by reading the opacity by EPA Reference Method 9.

**5. Specific Recordkeeping Requirements:**

Pursuant to 401 KAR 52:030, Section 26, records of the amount of natural gas burned and amount and hours of operation for #2 fuel oil burned shall be maintained on a monthly basis.

**6. Specific Reporting Requirements:**

- a. Pursuant to 401 KAR 52:030, Section 26, if #2 fuel oil is burned in the unit, the permittee shall submit quarterly reports including the fuel supplier certification and a certified statement signed by the owner or operator of the affected facility that the records of the fuel supplier certifications submitted represent the #2 fuel oil combusted during that quarter.
- b. See Section F.

## **SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **Emission Unit 18**

### **Twelve Diesel Fired Emergency Generators Ranging between 27.0 & 400 HP**

#### **Description:**

Primary Fuel:	No.2 Diesel
Maximum Continuous Rating:	27 to 400 HP
Construction Commenced:	twelve prior to 2004

#### **APPLICABLE REGULATIONS:**

None

#### **1. Operating Limitations:**

For each emission unit, the usage rate of fuel oil (12 month rolling total) in all affected facilities shall be restricted so that the emission limitations set forth in Section D of this permit are not exceeded.

#### **2. Emission Limitations:**

None

#### **3. Testing Requirements:**

None

#### **4. Specific Monitoring Requirements:**

- a. Pursuant to 401 KAR 52:030, Section 26, the permittee shall monitor the amount of diesel fuel consumed by each generator on a monthly basis.
- b. Pursuant to 401 KAR 52:030, Section 26, the permittee shall monitor the hours of operation of each generator on a monthly basis.

#### **5. Specific Recordkeeping Requirements:**

- a. Pursuant to 401 KAR 52:030, Section 26, the permittee shall compile and maintain records of the total amount of diesel fuel consumed by each generator on a monthly basis and on a consecutive twelve (12) month total.
- b. Pursuant to 401 KAR 52:030, Section 26, the permittee shall maintain records of the total hours of operation of each generator on a monthly basis and on a consecutive twelve (12) month total.

#### **6. Specific Reporting Requirements:**

See Section F

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****Emission Units 19, 20, & 21****Three Diesel Fired Emergency Generators****Description:**

EU 19 – Maximum Rating:	750 KW, (1000 HP)
Construction Commenced:	1995
EU 20 – Maximum Rating:	800 KW, (11180 HP)
Construction Commenced:	2000
EU 21 – Maximum Rating:	85 KW, (760 HP)
Construction Commenced:	1995

**APPLICABLE REGULATIONS:**

None

**1. Operating Limitations:**

For each emission unit, the usage rate of fuel oil (12 month rolling total) in all affected facilities shall be restricted so that the emission limitations set forth in Section D of this permit are not exceeded.

**2. Emission Limitations:**

See Section D.

**3. Testing Requirements:**

None

**4. Specific Monitoring Requirements:**

a. Pursuant to 401 KAR 52:030, Section 26, the permittee shall monitor the amount of diesel fuel consumed by each generator on a monthly basis.

b. Pursuant to 401 KAR 52:030, Section 26, the permittee shall monitor the hours of operation of each generator on a monthly basis.

**5. Specific Recordkeeping Requirements:**

a. Pursuant to 401 KAR 52:030, Section 26, the permittee shall compile and maintain records of the total amount of diesel fuel consumed by each generator on a monthly basis and on a consecutive twelve (12) month total.

b. Pursuant to 401 KAR 52:030, Section 26, the permittee shall maintain records of the total hours of operation of each generator on a monthly basis and on a consecutive twelve (12) month total.

**6. Specific Reporting Requirements:**

See Section F

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **Emission Units 22-27                  Six Indirect Heat Exchangers**

#### **Description:**

Primary fuel: Natural Gas  
E.U. 22, 23, & 24 --- Three AERCO Benchmark Model BMK 3.0 Boilers  
Maximum Continuous Rating: 2.0 MMBtu/hr each (Callahan Building)  
E.U. 25, 26, & 27---Three AERCO International KC-1000 style 210711  
Maximum Continuous Rating: 1.0 MMBtu/hr each  
Construction Commenced: 2008

#### **APPLICABLE REGULATIONS:**

401 KAR 59:015, New Indirect Heat Exchangers applicable to an emission unit with a capacity less than 250 MMBtu/hr and commenced on or after April 9, 1972.

#### **1.     Operating Limitations:**

See Section D.

#### **2.     Emission Limitations:**

- a. Pursuant to 401 KAR 59:015, Section 4(1)(b), particulate emissions shall not exceed 0.1 lb/ MMBtu based on a three-hour-average, for each emission unit.
- b. Pursuant to 401 KAR 59:015, Section 4(2), emissions shall not exceed twenty (20) percent opacity based on a six-minute average except:
  1. A maximum of forty (40) percent opacity shall be permissible for not more than six (6) consecutive minutes during in any sixty (60) consecutive minutes during cleaning the fire box or blowing soot.
  2. During building a new fire for the period required to bring the boiler up to operating conditions provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations.
- c. Pursuant to 401 KAR 59:015, Section 5(1)(b), sulfur dioxide emissions shall not exceed 0.8 lb/ MMBtu based on a three-hour-average, for each emission unit.

#### **Compliance Demonstration:**

The permittee is considered to be in compliance with PM, SO<sub>2</sub> and opacity standards while burning natural gas.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**3. Testing Requirements:**

See Section G4.

**4. Specific Monitoring Requirements:**

Pursuant to 401 KAR 52:030, Section 26, the permittee shall monitor the usage and hours of operation for the natural gas on a monthly basis.

**5. Specific Recordkeeping Requirements:**

Pursuant to 401 KAR 52:030, Section 26, records of the amount of natural gas burned and hours of operation shall be maintained on a monthly basis.

**6. Specific Reporting Requirements:**

See Section F.

**SECTION C - INSIGNIFICANT ACTIVITIES**

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:030, Section 6. Although these activities are designated as insignificant the permittee must comply with the applicable regulation. Process and emission control equipment at each insignificant activity subject to an opacity standard shall be inspected monthly and a qualitative visible emissions evaluation made. Results of the inspection, evaluation, and any corrective action shall be recorded in a log.

<u>Description</u>	<u>Generally Applicable Regulation</u>
Commonwealth Hall Thermal Solutions Boiler, Model# EVA0750BN1-UA FM Input Rating (Max) - 0.75MMBTU/Hr	None



## **SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS**

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.
2. PM, SO<sub>2</sub> and NO<sub>x</sub> emissions, measured by applicable reference methods, or an equivalent or alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.
3. Pursuant to 401 KAR 52:030, Section 1, emissions limitations and standards contained herein shall be legally and practically enforceable.
4. To preclude the applicability of 401 KAR 52:020, source wide emissions nitrogen oxides (NO<sub>x</sub>) shall not equal or exceed 90 ton per year. The source is limiting the indirect heat exchangers to 5840 hours per year and each diesel emergency generators to 50 hrs per year of operation while burning No. 2 fuel oil.

## **SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS**

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

## SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b-IV-1 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
  - a. Date, place (as defined in this permit), and time of sampling or measurements;
  - b. Analyses performance dates;
  - c. Company or entity that performed analyses;
  - d. Analytical techniques or methods used;
  - e. Analyses results; and
  - f. Operating conditions during time of sampling or measurement.
2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [401 KAR 52:030 Section 3(1)(f)1a and Section 1a-7 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
3. In accordance with the requirements of 401 KAR 52:030 Section 3(1)f the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
  - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
  - b. To access and copy any records required by the permit;
  - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.
4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
5. Summary reports of any monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Sections 1b-V-1 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].

**SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)**

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:030 Section 22. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All deviations from permit requirements shall be clearly identified in the reports.
7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
  - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
  - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.
8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7 above) to the Regional Office listed on the front of this permit within 30 days. Deviations from permit requirements, including those previously reported under F.7 above, shall be included in the semiannual report required by F.6 [Sections 1b-V, 3 and 4 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
9. Pursuant to 401 KAR 52:030, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit in accordance with the following requirements:
  - a. Identification of each term or condition;
  - b. Compliance status of each term or condition of the permit;
  - c. Whether compliance was continuous or intermittent;
  - d. The method used for determining the compliance status for the source, currently and over the reporting period.
  - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

## **SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)**

- f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications shall be mailed to the following addresses:

Division for Air Quality  
Florence Regional Office  
8020 Veterans Memorial Drive, Suite 110  
Florence, KY 41042

Division for Air Quality  
Central Files  
803 Schenkel Lane  
Frankfort, KY 40601

10. In accordance with 401KAR 52:030, Section 3(1)(d), the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee. If a KYEIS emission survey is not mailed to the permittee, then the permittee shall comply with all other emission reporting requirements in this permit.
11. The Cabinet may authorize the temporary use of an emission unit to replace a similar unit that is taken off-line for maintenance, if the following conditions are met:
- a. The owner or operator shall submit to the Cabinet, at least ten (10) days in advance of replacing a unit, the appropriate Forms DEP7007AI to DD that show:
    - (1) The size and location of both the original and replacement units; and
    - (2) Any resulting change in emissions;
  - b. The potential to emit (PTE) of the replacement unit shall not exceed that of the original unit by more than twenty-five (25) percent of a major source threshold, and the emissions from the unit shall not cause the source to exceed the emissions allowable under the permit;
  - c. The PTE of the replacement unit or the resulting PTE of the source shall not subject the source to a new applicable requirement;
  - d. The replacement unit shall comply with all applicable requirements; and
  - e. The source shall notify Regional office of all shutdowns and start-ups.
  - f. Within six (6) months after installing the replacement unit, the owner or operator shall:
    - (1) Re-install the original unit and remove or dismantle the replacement unit; or
    - (2) Submit an application to permit the replacement unit as a permanent change.

## SECTION G - GENERAL PROVISIONS

### 1. General Compliance Requirements

- a. The permittee shall comply with all conditions of this permit. A noncompliance shall be a violation of 401 KAR 52:030 Section 3(1)(b) and a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to the termination, revocation and reissuance, revision, or denial of a permit [Section 1a-2 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- b. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a-5 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- c. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:030 Section 18. The permit will be reopened for cause and revised accordingly under the following circumstances:
  - (1) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:030 Section 12;
  - (2) The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
  - (3) The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

- d. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Sections 1a- 6 and 7 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- e. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:030 Section 3(1)(c)].

**SECTION G - GENERAL PROVISIONS (CONTINUED)**

- f. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:030 Section 7(1)].
- g. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a-11 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- h. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a-3 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- i. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens. [Section 1a-12-b of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- j. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038 Section 3(6) [Section 1a-9 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- k. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:030 Section 11(3)].
- l. This permit does not convey property rights or exclusive privileges [Section 1a-8 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- m. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.
- n. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry.
- o. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders.

**SECTION G - GENERAL PROVISIONS (CONTINUED)**

- p. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.
- q. Pursuant to 401 KAR 52:030, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with:
  - (1) Applicable requirements that are included and specifically identified in this permit; and
  - (2) Non-applicable requirements expressly identified in this permit.

**2. Permit Expiration and Reapplication Requirements**

- a. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:030 Section 12].
- b. The authority to operate granted through this permit shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:030 Section 8(2)].

**3. Permit Revisions**

- a. Minor permit revision procedures specified in 401 KAR 52:030 Section 14(3) may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:030 Section 14(2).
- b. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.



**SECTION G - GENERAL PROVISIONS (CONTINUED)****4. Construction, Start-Up, and Initial Compliance Demonstration Requirements**

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction of the equipment described herein, Emission Units 22, 23, 24, 25, 26, & 27 in accordance with the terms and conditions of this permit.

- a. Construction of any process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.
- b. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, with a copy to the Division's Frankfort Central Office, notification of the following:
  - (1) The date when construction commenced.
  - (2) The date of start-up of the affected facilities listed in this permit.
  - (3) The date when the maximum production rate specified in the permit application was achieved.
- c. Pursuant to 401 KAR 52:020, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the Cabinet may extend these time periods if the source shows good cause.
- d. For those affected facilities for which construction is authorized by this permit, a source shall be allowed to construct with the proposed permit. Operational or final permit approval is not granted by this permit until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055. If compliance is not demonstrated within the prescribed timeframe provided in 401 KAR 50:055, the source shall operate thereafter only for the purpose of demonstrating compliance, unless otherwise authorized by Section I of this permit or order of the Cabinet.
- e. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements. Testing must also be conducted in accordance with General Provisions G.5 of this permit.
- f. Terms and conditions in this permit established pursuant to the construction authority of 401 KAR 51:017 or 401 KAR 51:052 shall not expire.

**SECTION G - GENERAL PROVISIONS (CONTINUED)****5. Testing Requirements**

- a. Pursuant to 401 KAR 50:045 Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least Thirty (30) days prior to the test.
- b. Pursuant to 401 KAR 50:045 Section 5, in order to demonstrate that a source is capable of complying with a standard at all times, any required performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirements on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.
- c. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

**6. Acid Rain Program Requirements**

- a. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

**7. Emergency Provisions**

- a. Pursuant to 401 KAR 52:030 Section 23(1), an emergency shall constitute an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or other relevant evidence that:
  - (1) An emergency occurred and the permittee can identify the cause of the emergency;

**SECTION G - GENERAL PROVISIONS (CONTINUED)**

- (2) The permitted facility was at the time being properly operated;
  - (3) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and,
  - (4) The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two (2) working days of the time when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and the corrective actions taken.
  - (5) Notification of the Division does not relieve the source of any other local, state or federal notification requirements.
- b. Emergency conditions listed in General Provision G.7.a above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:030 Section 23(3)].
  - c. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:030 Section 23(2)].

**8. Ozone depleting substances**

- a. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
  - (1) Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
  - (2) Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
  - (3) Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
  - (4) Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166.
  - (5) Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
  - (6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
- b. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

## **SECTION G - GENERAL PROVISIONS (CONTINUED)**

### 9. Risk Management Provisions

- a. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center  
P.O. Box 1515  
Lanham-Seabrook, MD 20703-1515.

- b. If requested, submit additional relevant information to the Division or the U.S. EPA.

**SECTION H - ALTERNATE OPERATING SCENARIOS**

**SECTION I - COMPLIANCE SCHEDULE**

**N/A**